

# PATENT COOPERATION TREATY

To:

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## PCT

### WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing (day/month/year)	10 May 2006 (10.05.2006)
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Applicant's or agent's file reference <b>AZ06-009WOWW</b>	FOR FURTHER ACTION See paragraph 2 below
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International application No. <b>PCT/KR 2006/000282</b>	International filing date (day/month/year) <b>25 January 2006 (25.01.2006)</b>	Priority Date (day/month/year) <b>25 January 2005 (25.01.2005)</b>
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International Patent Classification (IPC) or both national classification and IPC <b>D06F 39/12 (2006.01); F24F 13/24 (2006.01)</b>
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Applicant  <b>LG ELECTRONICS INC.</b>
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**1. This opinion contains indications relating to the following items:**

- ☒ Cont. No. I      Basis of the opinion
- ☐ Cont. No. II      Priority
- ☐ Cont. No. III      Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Cont. No. IV      Lack of unity of invention
- ☒ Cont. No. V      Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Cont. No. VI      Certain documents cited
- ☐ Cont. No. VII      Certain defects in the international application
- ☐ Cont. No. VIII      Certain observations on the international application

**2. FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

**3. For further details, see notes to Form PCT/ISA/220.**

Name and mailing address of the ISA/ AT <b>Austrian Patent Office</b> Dresdner Straße 87, A-1200 Vienna  Facsimile No. +43 / 1 / 534 24 / 535	Authorized officer <b>WININGER B.</b>  Telephone No. +43 / 1 / 534 24 / 460
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IAP9/Rec'd PCT/PTO 21 SEP 2006

**Continuation No. I**

**Basis of the opinion**

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed.

**Continuation No. V**

**Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Claims 6-11, 16, 18-20	YES
	Claims 1-5, 12-15, 17	NO
Inventive step (IS)	Claims 7-11, 19	YES
	Claims 1-6, 12-18, 20	NO
Industrial applicability (IA)	Claims 1-20	YES
	Claims ----	NO

**2. Citations and explanations:**

The following documents have been cited in the Search Report:

D1: WO 2003/057969 A1

D2: WO 1997/009527 A1

D3: EP 0 844 439 A2

Document D1 discloses a washing machine for preventing leakage of bubbles. The washing machine includes: a housing 1, a tub 20 including at least one opening 21, 22, 23 and at least one pipe 21b, 22b, 23b connected with the opening 21, 22, 23, a drum 30 and cut off means 100, 200, 300, 400 for preventing bubbles from being leaked to an outside through the opening 21, 22, 23 and the pipe 21b, 22b, 23b. The joint assembly 400 includes a penetration hole 410 formed in the housing 10 and an extension pipe 420 inserted into the penetration hole 410. The extension pipe 420 is connected with the pipes 21b, 22b and is also inserted into the penetration hole 410, thereby fixing the pipes 21b, 22b to the housing 10. A vertically extended inner barrier rib 420a is formed within the extension pipe 420 for preventing bubbles being leaked. The inner barrier rib 420a results in partially closing the extension pipe 420 and partially closing the pipes 21b, 22b connected to the extension pipe 420. As the joint assembly 400 is constructed in the same way as the fastening portion 110 of the application the joint assembly 400 would also prevent noise from leaking outside of the cabinet. Therefore the subject-matters of claims 1 - 5, 12 - 15, 17 are not new and do not involve an inventive step.

Document D2 includes an exhaust silencer with an air inlet duct provided with walls 520. The walls 520 can be of different radial depths and at different distances apart in the axial direction, forming chambers. By reason that both documents D1 and D2 include silencer the skilled person would therefore regard it as a normal design option to combine the features of document D1 and D2 to solve the problem posed. Considering documents D1 and D2 the features of claims 6, 16, 18, 20 are shown. Hence, the subject-matters of claims 6, 16, 18, 20 do not involve an inventive step.

**WRITING OPINION OF THE  
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International application No.  
**PCT/KR 2006/000282**

Document D3 comprises an air intake vent installed inside a duct 2. The duct 2 has located inside it at least one first vane 5 which is inclined with respect to the longitudinal axis of the duct 2 so that its surface directed towards the said external environment forms an acute angle with the direction of the flow along the duct 2. Between the first vane 5 there is arranged, at a predetermined distance from the first vane 5, a second vane 5' which intercepts entirely the projected path, along the longitudinal axis of the duct 2.

In summary it can be ascertained that the subject-matters of claims 1 - 5, 12 - 15, 17 are not new and do not involve an inventive step. The subject-matters of claims 6, 16, 18, 20 are new but do not involve an inventive step. The subject-matters of claims 7 - 11, 19 are new and inventive. Industrial applicability is given.

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